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HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			DANIEL JR, WILLIE J	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/773,255
Filing Date: January 31, 2001
Appellant(s): AMALFITANO ET AL.

MAILED

MAR 08 2006

Technology Center 2600

Joseph M. Maraia
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 26 October 2005 appealing from the Office action mailed 15 October 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection Applicable to the Appealed Claims

The following ground(s) of rejection are applicable to the appealed claims:

A. *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3, 4, 8-17 are rejected under 35 U.S.C. 102(b) as being anticipated by **Dent (US 5,894,473)**.

Regarding **Claim 3**, Dent discloses in a cellular mobile radiotelephone system which reads on the claimed “wireless communication system” in which mobile station (170) reads on the claimed “remote subscriber units” are located in cells, and at least two cells are located adjacent one another, each cell having a base station unit (160) that coordinates communication with remote units (170) located within its respective cell (see col. 20, lines 39-46; Figs. 10 and 12), a method comprising the steps of:

in an operating base station (1), determining the existence of communications occurring in adjacent cells (see col.8, line 29-37; col. 16, lines 11-15, 32-64), where the base station is able to determine the communication in adjacent cells to allocate timeslots according to the power;

receiving, by the operating base station (1), a report of an expected time of low interference communications from an adjacent base station (2) (see col.8, line 29-37; col. 16, lines 11-15, 32-64; col. 20, line 39 - col. 21, line 6), where the base station is informed of the low and high interference from an adjacent base station to determine how to allocate timeslots in which the report is the control information provided by the MSC (165) or base station (160) during the monitoring of cells. The MSC or BS controller performs the processing decisions in which the BS provides the information of the candidate cells to the mobile unit. Therefore, the each BS must have information from each of the adjacent BS.; and

scheduling transmission of high interference communications associated with a subscriber unit (170) in the cell associated with the operating base station (1) at the expected time of low interference communications in the adjacent cell (2) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64), where the transmission of signals are schedule in accordance to high power with low power to minimize interference between timeslots.

Regarding **Claim 4**, Dent discloses wherein the report is a report of a service status message from the adjacent base station (2) and is relayed from a subscriber unit (170) located in the cell served by the serving base station (1) (see col.8, line 29-37; col. 16, lines 11-15, 32-64; col. 20, line 39 - col. 21, line 6; Fig. 10 and 12), where the absolute and relative information (report) is broadcasted to the mobile (170) from the base station where the candidate cells are monitored by base stations and MSCs to determine how to allocate timeslots for mobiles within cells. The MSC or BS controller

performs the processing decisions in which the BS provides the information of the candidate cells to the mobile unit. Therefore, each BS must have information from each of the adjacent BS.

Regarding **Claim 8**, Dent discloses in a wireless communication system in which remote subscriber units (170) are located in cells, and at least two cells are located adjacent one another, each cell having a base station unit (160) that coordinates communication with remote units (160) located within its respective cell (see col. 20, lines 39-46; Figs. 10 and 12), a method comprising steps of:

in an operating base station (1), determining the existence of communications occurring in adjacent cells (see col.8, line 29-37; col. 16, lines 11-15, 32-64), where the base station is able to determine the communication in adjacent cells to allocate timeslots according to the power;

receiving, by the operating base station (1), a report of an expected time of high and low interference communications from an adjacent base station (2) (see col.8, line 29-37; col. 16, lines 11-15, 32-64; col. 20, line 39 - col. 21, line 6), where the base station is informed of the low and high interference from an adjacent base station determine how to allocate timeslots in which the report is the control information provided by the MSC or base station during the monitoring of cells. The MSC or BS controller performs the processing decisions in which the BS provides the information of the candidate cells to the mobile unit. Therefore, each BS must have information from each of the adjacent BS.
; and

scheduling transmission of high interference communications associated with a subscriber unit (170) in the cell associated with the operating base station (1) at the expected time of low interference communications in the adjacent cell (2) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64), where the transmission of signals are schedule in accordance to high power with low power to minimize interference between timeslots.

Regarding **Claim 9**, Dent discloses a method as claimed in claim 3, wherein transmission scheduling further comprises:

assigning specific time slots to specific subscriber units (170) (see col. 15, lines 42-49; col. 16, line 2-5, 11-15, 32-64), where the mobile stations are provided timeslots according to the power level of the signal strength and interference level; and

coordinating allocation of a time slot to a high interference communication in one base station (1) with the allocation of a time slot for a low interference communication in an adjacent base station (2) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64), where the transmission of signals are schedule in accordance to high and low power to minimize interference between timeslots.

Regarding **Claim 10**, Dent discloses wherein the coordinated communications are reverse link signals traveling from the subscriber units (170) towards the base stations (160) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 15, lines 42-49; col. 16, lines 2-5,11-15,32-64; Fig. 12), where the mobile unit communicates (transmit) data with the base station over a reverse link which would be coordinated according to power and interference level.

Regarding **Claim 11**, Dent discloses wherein the coordinated communications are forward link signals traveling from the base station (160) towards the subscriber units (170) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 15, lines 42-49; col. 16, lines 2-5,11-15,32-64; Fig. 12), where the mobile unit communicates (receive) data from the base station over a forward link which would be coordinated according to power and interference level.

Regarding **Claim 12**, Dent discloses scheduling transmission of low interference communications associated with a subscriber unit (170) in the cell associated with the operating base station (1) at the expected time of high interference transmissions from the adjacent base station (2) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64), where the transmission of signals are schedule in accordance to high power with low power to minimize interference between timeslots.

Regarding **Claim 13**, Dent discloses a wireless communication system (see col. 20, lines 39-46; Figs. 10 and 12) comprising:

at least two cells located adjacent to one another, each cell having a base station unit (160) that coordinates communication with remote units (170) located within its respective cell (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64; Fig. 12);

a communications link for transmitting, to a first base station (1) from a second base station (2), a report of an expected time of high and low interference communications from an adjacent base station (2) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64; Fig. 12), where the base stations communicate with

each other and the MSC (165) or base station controller which is inherent to provide a report to determine how to allocate timeslots in accordance to high and low power interference. The MSC or BS controller performs the processing decisions in which the BS provides the information of the candidate cells to the mobile unit. Therefore, each BS must have information from each of the adjacent BS. ; and

a processor (129) which reads on the claimed “resource allocator” at the first base station (1) for scheduling transmission of high interference communications associated with a subscriber unit (170) in the cell associated with the first base station (1) at the expected time of low interference communications in the adjacent cell (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 16, lines 2-5,11-15,32-64), where processor of the base station allocates timeslots to schedule high interference with low interference.

Regarding **Claim 14**, Dent discloses wherein the communication link is a wire line (see col. 20, lines 39-47; Fig. 12), where the communication link is a wire between the base station (160) and MSC (165).

Regarding **Claim 15**, Dent discloses wherein the communication link further comprises a control and processing unit (162) which reads on the claimed “resource allocation station” (see col. 20, lines 39-56; Fig. 12), where the link is connected to the processing unit of the base station (160).

Regarding **Claim 16**, Dent discloses wherein the coordinated communications are reverse link signals traveling from the subscriber units (170) towards the first base station (160) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 15, lines 42-49;

col. 16, lines 2-5,11-15,32-64; Fig. 12), where the mobile unit communicates (transmit) data with the base station over a reverse link which would be coordinated according to power and interference level.

Regarding **Claim 17**, Dent discloses wherein the coordinated communications are forward link signals traveling from the first base station (160) towards the subscriber units (170) (see col. 8, line 29-37; col. 9, lines 15-29; col. 10, lines 20-36; col. 15, lines 42-49; col. 16, lines 2-5,11-15,32-64; Fig. 12), where the mobile unit communicates (receive) data from the base station over a forward link which would be coordinated according to power and interference level.

(10) Response to Argument

The Examiner's response to the arguments of the brief concerning the art rejection of Claims 3-4 and 8-17 are as followed:

A. Response to Argument (pg. 7, section C, 2nd paragraph)

Regarding appellant's argument of claims 3, 8, and 13 presented in the argument on pg. 7, section C, 2nd paragraph, "Dent does not teach, suggest, or otherwise make obvious transmitting or receiving a report of an expected time of high and/or low interference communication from an adjacent base station", the Examiner respectfully disagrees. Appellant admits on pg. 6, section B, lines 1-2, "...that Dent is concerned with coordinating the transmission of cellular signals...."

The Examiner maintains that Dent discloses "...transmitting or receiving a report of an expected time of high and/or low interference communication from an adjacent

base station..." (see col.8, line 29-37; col. 16, lines 11-15, 32-64; col. 20, line 39 - col. 21, line 6; Fig. 12), where the base station (1) is informed of the low and high interference from an adjacent base station (2) to determine how to allocate timeslots. The report is the control information provided by the MSC (165) or base station (160) during the monitoring of cells (see col.8, line 29-40; col. 9, lines 13-19; col. 20, line 39 - col. 21, line 6; Figs. 5a-b and 12), where the mobile switching center (MSC) or base station (BS) monitors signal strength and perform the task of signal strength processor. As a result of the signal strengths being monitored, sorted, and reordered in real-time or dynamically according to priority or changes (see col. 9, lines 13-19; col. 13, lines 35-48), the system allows for optimal coordination of high power signals, medium power signals, and low power signals between adjacent base stations (1, 2, and 3) (see col. 16, lines 11-16, 32-64). The MSC or BS controller (e.g., processor) performs the processing decisions in which the BS provides the information of the candidate cells to the mobile unit (see col. 20, line 39 - col. 21, line 6; Fig. 12), where the MSC, BS, and mobile unit communicate and exchange information within the system to determine how allocate the timeslots. Therefore, the each BS must have information reported, transmitted, or received from each of the adjacent BS in order to provide the scheduling (or coordinating) of timeslots between low and high interference. Also, the information allows for candidate cells to be monitored that may be more suitable for the mobile unit (see col. 21, lines 4-6).

B. Response to Argument (paragraph bridging pg. 7-8)

Appellant's argument of claims 3, 8, and 13 on pg. 7, section C, 3rd paragraph, line 6 - pg. 8, 1st paragraph, line 1, that "...with a) subtractive demodulation...b) re-use partitioning...c) handover...", these arguments are drawn to subject matter not claimed.

C. Response to Argument (pg. 8, section C, 2nd paragraph)

Appellant's argument of claims 3, 8, and 13 on pg. 8, section C, 2nd paragraph, lines 9-10, that "...there is no teaching or suggestion of an exchange of any **statistics** about...", the Examiner respectfully disagrees.

In response to appellant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature(s) upon which applicant relies (i.e., "...an exchange of any **statistics** about...") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding appellant's argument of claims 3, 8, and 13, the claims do not recite such a feature "...an exchange of any **statistics** about..." which the appellant relies on for the argument.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 2686

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Willie J. Daniel, Jr. *WJD*
WJD, JR

05 March 2006

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